

GULL STREET BRIDGE  
Spanning the Kalamazoo River at Gull Street  
Kalamazoo  
Kalamazoo County  
Michigan

HAER No. MI-63

HAER  
MICH  
39-KALAM,  
5-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD  
National Park Service  
Northeast Region  
U.S. Custom House  
200 Chestnut Street  
Philadelphia, PA 19106

HAER  
MICH  
39-KALAM,  
5-

## HISTORIC AMERICAN ENGINEERING RECORD

### GULL STREET BRIDGE

HAER No. MI- 63

**Location:** Spanning the Kalamazoo River at Gull Street in the City of Kalamazoo, Kalamazoo County, Michigan

USGS Kalamazoo Quadrangle, Universal Transverse  
Mercator Coordinates: 16.617700.4683720

**Date of Construction:** 1911

**Engineer:** H.A. Johnston

**Contractor:** Richard Heystek, Sr.

**Present Owners:** City of Kalamazoo  
241 W. South Street  
Kalamazoo, MI 49007

**Present Use:** Vehicular/Pedestrian Bridge

**Significance:** The Gull Street Bridge is an early example of a large, earth-filled concrete arch bridge. It has been officially determined to be eligible for listing in the National Register of Historic Places by the Michigan Bureau of History.

**Project Information:** This historic documentation was undertaken in January 1992 in accordance with the Memorandum of Agreement by the Federal Highway Administration, Michigan State Historic Preservation Officer, Advisory Council on Historic Preservation, Michigan Department of Transportation, and the City of Kalamazoo, Michigan as a mitigative measure prior to demolition and replacement of the bridge.

Patricia Fisher  
Environmental Scientist  
WW Engineering & Science  
Grand Rapids, Michigan

The existing Gull Street Bridge spans the Kalamazoo River (as shown in the general location map) in Section 15 of the City of Kalamazoo, Kalamazoo County, Michigan (T2S, R11W). The bridge connects the northeast and southwest portions of Gull Street. The bridge and its immediate surroundings are shown on the Gull Street Bridge Site Map.

The Gull Street Bridge was built in 1911 by the City of Kalamazoo under the supervision of H.A. Johnston, City Engineer. The contractor was Mr. Richard Heystek, Sr. This was the second bridge to be built on the site. The first Gull Street Bridge was built in 1879 and had pilings of white oak (1).

The bridge is a large, three-arched, earth-filled concrete structure approximately 212 feet in length. Each arch is about 59 feet in length, forming a clear span between substructures.

The bridge rests on two concrete piers and a concrete abutment on each end. The bridge deck consists of an asphalt wearing surface. The bridge is 41 feet wide. The roadway (two lanes) is approximately 32 feet wide.

The Gull Street Bridge's railings are concrete. A concrete sidewalk (5 feet wide) exists on the northwest side of the bridge. The roadways adjoining the bridge are each 46 feet wide.

The Gull Street Bridge has been officially determined by the State of Michigan Historic Preservation Officer (SHPO) and the Department of the Interior as eligible for the National Register of Historic Places because it is an early example of a large, earth-filled concrete arch bridge. The bridge is an aesthetically highly pleasing example of the arch genre, in the opinion of the SHPO.

Historical information on the Gull Street Bridge is limited. Some pertinent information was found at the Kalamazoo Public Library and West Michigan University Archives and Regional History Collections. Mr. Donald Heystek of Kalamazoo, son of Mr. Richard Heystek, Sr., provided several old photographs and some information on the Gull Street Bridge. Mr. Arthur Heystek of Kalamazoo, grandson of Mr. Richard Heystek, Sr., provided historical photographs and postcards of the bridge. The Kalamazoo Public Museum supplied postcards of the bridge. The Kalamazoo County Road Commission supplied a newspaper article.

No significant events or persons are known to be connected with the bridge. According to Mr. Donald Heystek, the only event he associated with the Gull Street Bridge was the annual July 4th parade. Years ago the parade would cross over the Gull Street Bridge and go to the nearby cemetery on Riverview Drive to pay tribute to the Civil War veterans.

Mr. Heystek bid \$17,999.99 for the bridge contract which he received on March 3, 1911 (2). According to Mr. Donald Heystek, city officials wanted the bridge built, but finances were not available from the city. Mr. Richard Heystek, Sr., went ahead without the funding and hired engineers and prime contractors to build the bridge. The city reimbursed him after the bridge was completed.

Several of the Gull Street Bridge laborers were immigrants. Mr. Heystek, himself an immigrant from the Netherlands, paid the passage for some of these men and their families from the old country, and in return "they worked-off that cost in his employ." (3)

Earth-filled concrete arch construction was the engineering technique used in construction of the bridge (4). First, wooden platforms were constructed on timber piles to support the concrete poured to form the arches. Concrete headwalls and railings were then constructed and earth-fill was placed between the walls over the arches. Finally, the roadway was surfaced and the bridge opened to traffic.

As a contractor, Mr. Heystek built more than just bridges. He built roads in Indiana and Ohio and "became the second road paver in the state of Michigan...." (3) He also was responsible for some of the sidewalks and brick streets in Kalamazoo (3). A family business started by Mr. Heystek still exists today in Kalamazoo as Heystek and Sons Asphalt Paving and Sealing (3).

City officials were pleased with the style of the Gull Street Bridge (5). In 1912 they stated that they planned "to preserve a uniform plan of bridge building in this city in the future and all bridges constructed will be patterned after the Mills [a nearby city bridge, also constructed by Mr. Heystek, of similar design] and Gull Street bridges." (5)

In 1932 disintegration and corrosion had damaged the bridge to the extent that repairs were needed. The City Engineer, Edward S. Clark, reported "that the life and safe usefulness of the Gull Street bridge can be lengthened eight to 10 years by repairs...." (6) The cost to repair this bridge was approximately \$5,871 (6). Half of this cost was funded by the state since trunk line M-43 formerly crossed over the bridge (6).

This bridge has not been significantly altered, although the original lampposts are gone.

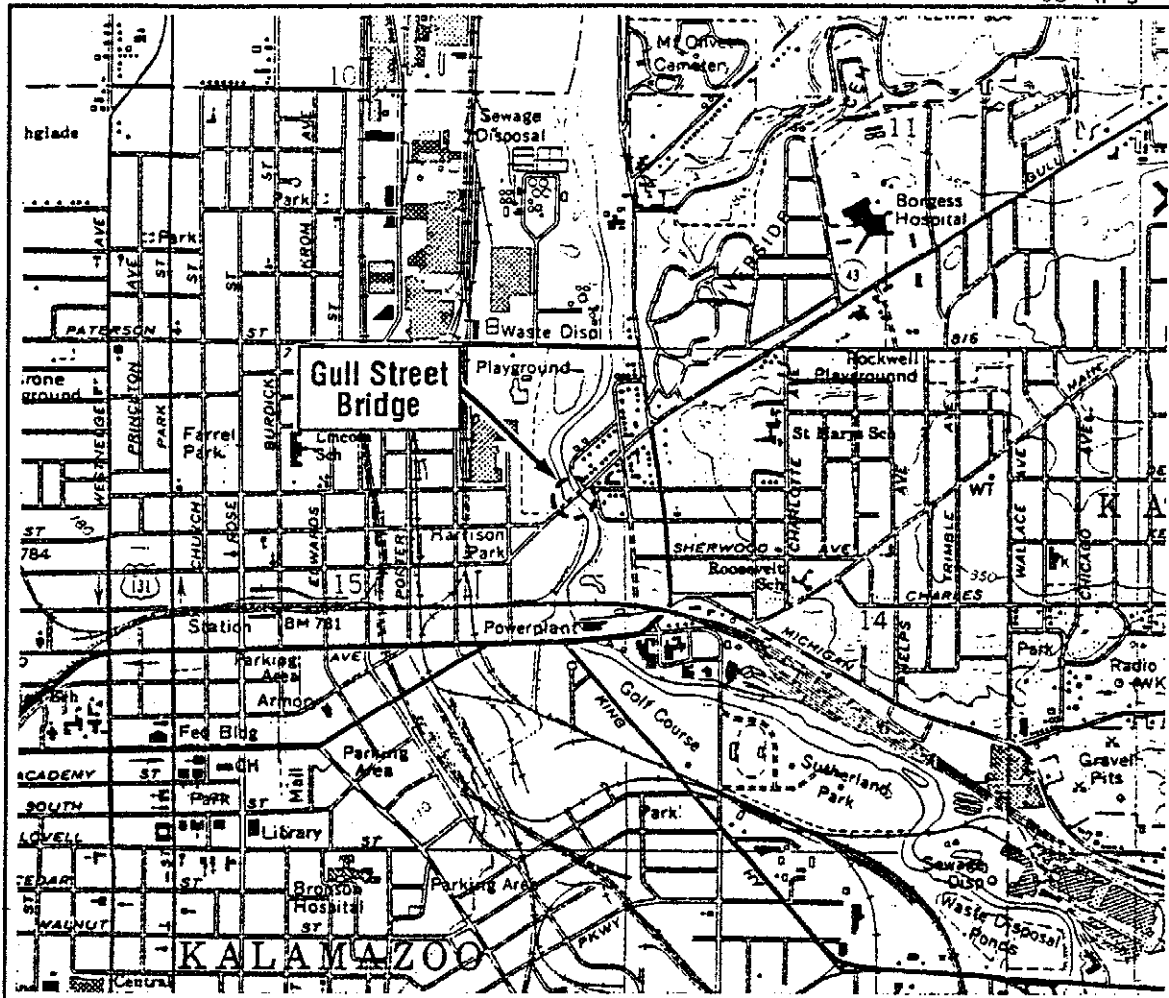
The Gull Street Bridge is an important link over the Kalamazoo River within the City of Kalamazoo. The bridge is also very important to police and fire protection. According to traffic counts in 1991 by the City of Kalamazoo, current two-way traffic volumes on the Gull Street Bridge show almost 10,200 vehicles per day use this route. State Route M-43 formerly crossed the Kalamazoo River at the Gull Street Bridge and was re-routed to Michigan Avenue at a later date.

Recent bridge inspections have revealed that the main structural elements of the bridge are deteriorating. The bridge is characterized by cracking and large pitted areas where the concrete has deteriorated and fallen off the structure to the point where the reinforcing steel rods are exposed and showing signs of deterioration. The loss of the concrete side walls exposes the earth fill to erosion, especially during high water levels.

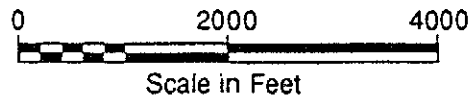
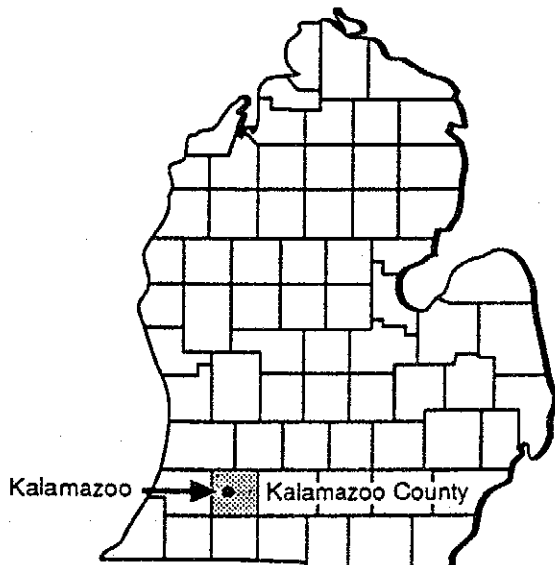
The bridge has a weight limit of 36 tons. This limit is less than fifty percent of legal truck loads for the state of Michigan. Continued deterioration of the bridge will result in even lower limits for this bridge until it will eventually need to be closed.

### BIBLIOGRAPHY

1. Ross Collier Collection, A-1911, "Bridges", February 21, 1911. (Original collection in possession of the Archives & Regional History Collections, Western Michigan University, Kalamazoo, Michigan).
2. Ross Collier Collection, A-1911, "Heystek, Richard", March 3, 1911. (Original collection in possession of the Archives & Regional History Collections, Western Michigan University, Kalamazoo, Michigan).
3. "Progress... for 80 Years". *Kalamazoo Gazette*, July 4, 1976, page C-4. (Original article in possession of Kalamazoo County Road Commission).
4. "Early Engineering". *Kalamazoo Gazette*, May 5, 1991, (no page number provided). (Original article in possession of the Reference Department, Kalamazoo Public Library).
5. "Mill Street Bridge Will Open Monday". *Kalamazoo Telegraph Press*, October 10, 1912, (no page number provided). (Original article in possession of the Reference Department, Kalamazoo Public Library).
6. "Two City Bridges Will Be Repaired". *Kalamazoo Gazette*, May 17, 1932 (no page number provided). (Original article in possession of the Reference Department, Kalamazoo Public Library).



Source: U.S. Geological Survey Map - Kalamazoo Quadrangle, 1973



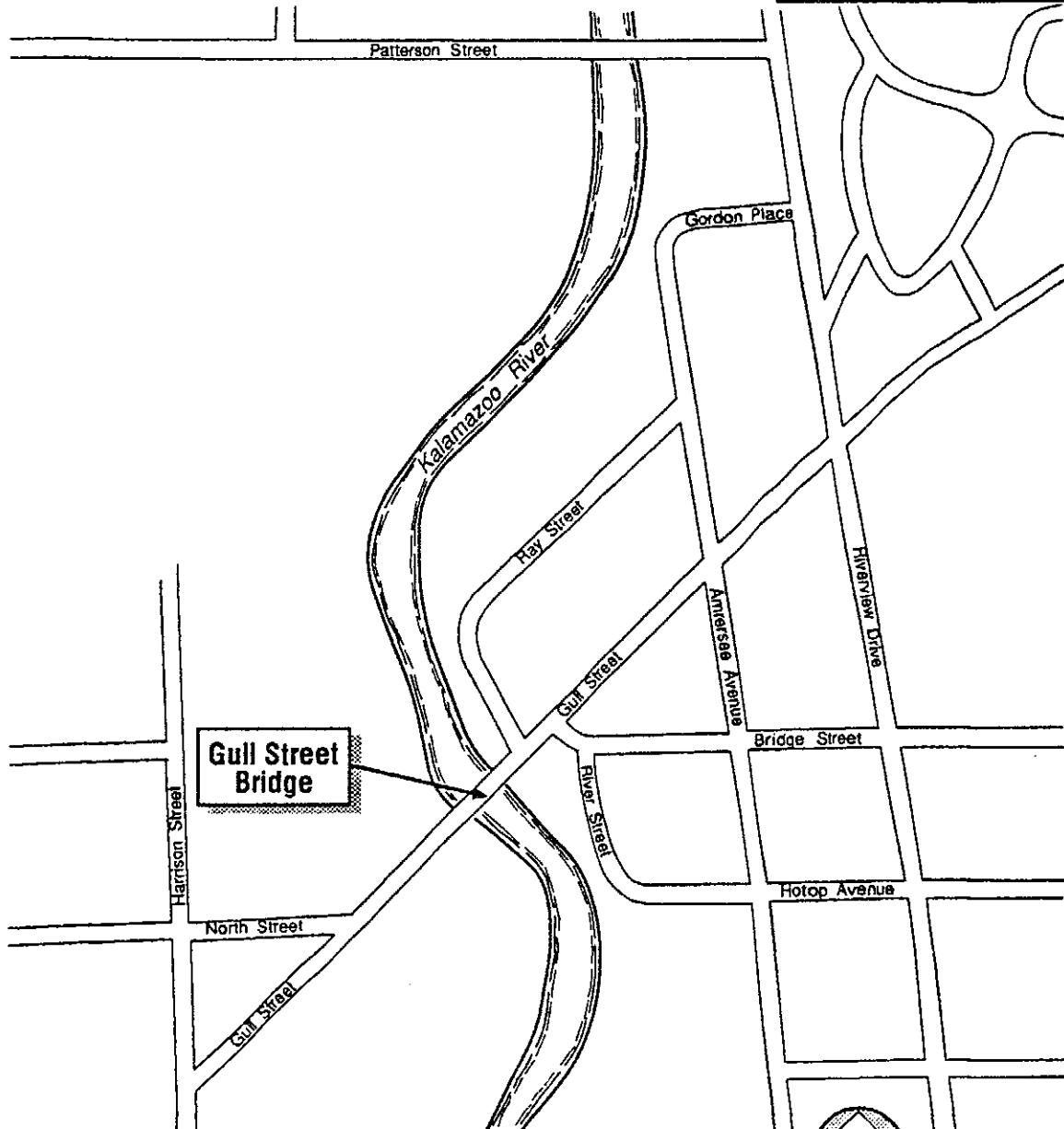
Scale in Feet

Figure 1

**SITE LOCATION MAP**  
**Gull Street Bridge • Kalamazoo River**  
**Kalamazoo, Michigan**

March 1992

63239



0 200 400 800  
Approximate scale in feet

Figure 2

**SITE MAP**

Gull Street Bridge • Kalamazoo River

Kalamazoo, Michigan

March 1992

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